PEACE/WILLISTON
FISH & WILDLIFE
COMPENSATION
PROGRAM

BC hydro

BRITISH
COLUMBIA

A Reconnaissance Survey of Unnamed Lake (Moose Lake)

M. J. Hunter
March 1997

PWFWCP Report No. 146

105-02898/

The Peace/Williston Fish & Wildlife Compensation Program is a cooperative venture of BC Hydro and the provincial fish and wildlife management agencies, supported by funding from BC Hydro. The Program was established to enhance and protect fish and wildlife resources affected by the construction of the W.A.C. Bennett and Peace Canyon dams on the Peace River, and the subsequent creation of the Williston and Dinosaur Reservoirs.

Peace/Williston Fish and Wildlife Compensation Program, 1011 Fourth Ave. 3rd Floor, Prince George B.C. V2L 3H9

Website: *www.bchydro.bc.ca/environment/initiatives/pwcp/*

This report has been approved by the Peace/Williston Fish and Wildlife Compensation Program Fish Technical Committee.

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A RECONNAISSANCE SURVEY OF

UNNAMED LAKE # 7

WATERSHED:	**Williston Reservoir (Parsnip Reach)**
DATE OF SURVEY:	**July 16,1996**
FIELD CREW LEADER:	**Mark Hunter**
FIELD ASSISTANT:	**Karin Mathias**
REPORT PREPARED BY:	**Mark Hunter**

BRITISH COLUMBIA CONSERVATION FOUNDATION

PEACE / WILLISTON FISH AND WILDLIFE COMPENSATION PROGRAM

B. C. MINISTRY OF ENVIRONMENT, LANDS AND PARKS

FUNDED BY: FOREST RENEWAL BRITISH COLUMBIA

RELEASED BY: _____

D. J. Cadden, Regional Fisheries Biologist

LAKE: Unnamed Lake # 7 **SYSTEM NAME:** Nation River

A.S.A.P. REFERENCE NO.: **WATERSHED CODE: 237-6045**

DATA ON FILE FOR THIS SURVEY

Location	X	Dissolved 02 / Temp. Profiles	X
Physical Data	X	Winter Dissolved 02 / Temp. Profiles	--
Bench Mark	X	Netting Record	X
Terrain Features	X	Lake Catch Summary	X
Access	X	Individual Fish Data	X
Resorts and Campsites	X	Fish Preserved	--
Other Developments	X	Stomach Analysis	X
Obstructions and Pollutions	X	Scale Reading	X
Special Restrictions	X	Location of Inventory Sites	X
Aquatic Plants	X	Photograph Directory	X
Wildlife Observations	X	Appendices	
Miscellaneous Comments	X	A: Water Chemistry Analysis	X
Lake Drainage	X	B: Tributary Stream Data	X
Fisheries Management Comments	X	C: Fish Scale Analysis	X
History of Previous Surveys	X	Bathymetric Map Reduction	X
Water Chemistry Summary	X	Bathymetric Map	X

LOCATION

Location:	approximately 121 km west of Mackenzie		
Elevation:	975 m ± 25 m	U.T.M.:	10.373401.6121082
Latitude / Longitude:	55°13'12" 124°59'24"	N.T.S. Map No.:	93 / N - 2
Management Unit:	7-28	Biogeoclimatic Zone:	Sub-Boreal Spruce
Ecoprovince:	Sub-Boreal Interior	Ecoregion:	Fraser Basin
Ecosection:	Babine Uplands		

Drainage: Unnamed C. --> Tchentlo L. --> Nation R. --> Chuchi L. --> Nation R. --> Williston Reservoir (Parsnip Reach - Nation Arm) --> Peace R.

PHYSICAL DATA

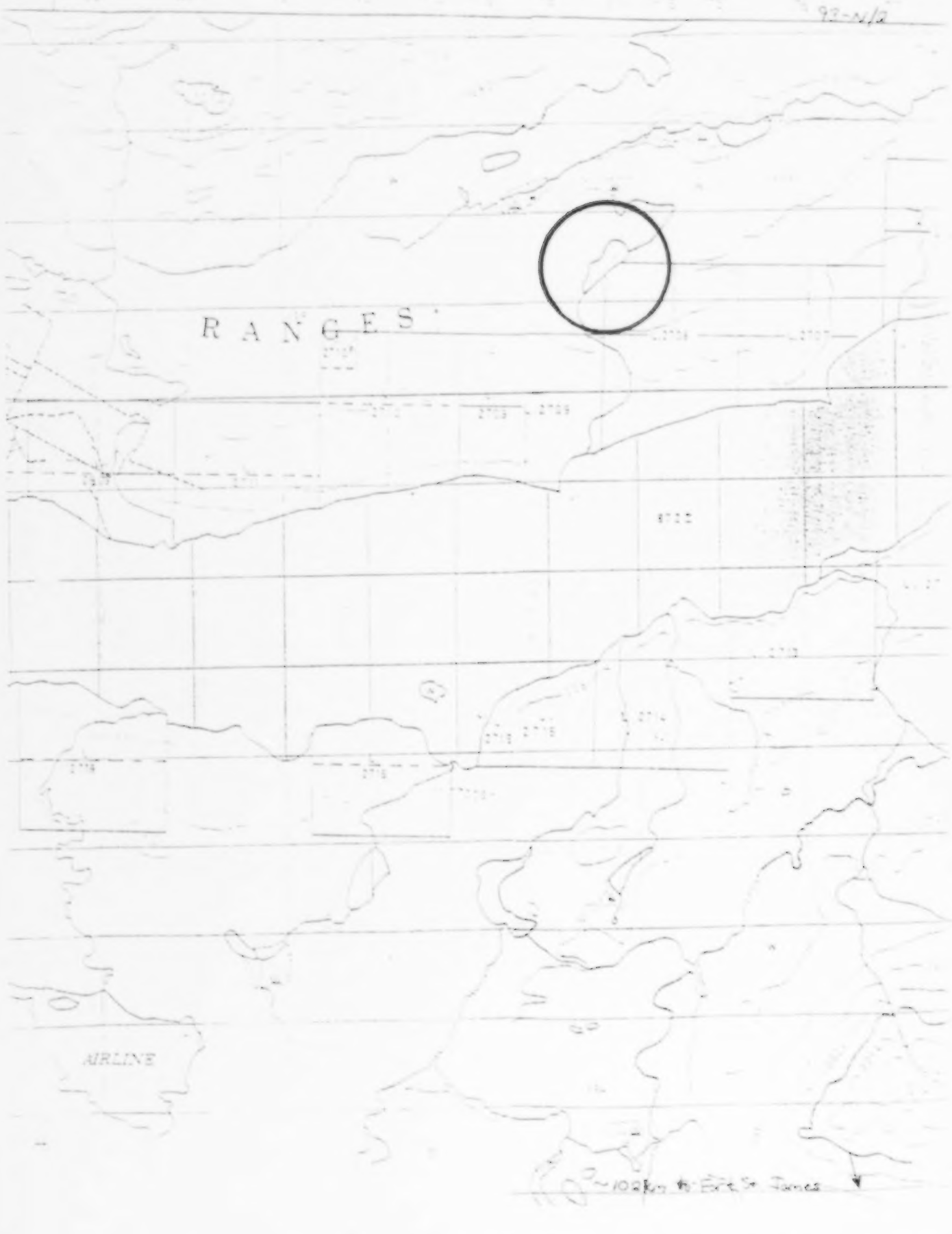
Lake Drainage Area:	2.0 km^2	Volume:	213 778 m^3
Water Surface Area:	132 317 m^2	Perimeter of Islands:	0 m
Area Above 6 m Contour:	132 317 m^2	Number of Islands:	0
Shoreline Perimeter:	1 743 m	Mean Depth:	1.7 m
Maximum Depth:	5.1 m	Secchi Reading:	3.15 m
Filterable Residue (TDS):	70 mg/L		

Sounding Device: Lowrance X- 15 Elevation Source: Contour Interpolation

BENCHMARK

(Iron spike, center of red circle) located 2.0 m above present water level in a 20 cm diameter lodgepole pine tree that is 5.6 m from the present water's edge and located on the northwest side of the lake approximately 45.0 m north of beaver hut # 2 (Plate # 4).

High Water Mark: 0.1 m above water level at time of survey


93-N/12
RANGES
AIRLINE
~100km to Fort St James

LAKE: Unnamed Lake # 7

TERRAIN FEATURES

Immediate Shoreline:

A sedge grass front with alders and willows behind, and spruce and lodgepole pine trees on a low slope as a backing to that, dominates the shoreline growth on all sides of Unnamed Lake # 7. Mixed in with the spruce and lodgepole pine trees is a large amount of huckleberry and bunchberry plants. The exception to this frontal growth is in the two marsh areas, and in the grassy area on the north shore. In these marsh areas, which are located in the southwest corner and east corner of the lake, the immediate shoreline growth is dominated by sedge grasses and willows on a relatively flat slope. In the marsh in the east corner of the lake, there is also some spruce growth. The small grass clearing is fronted by grasses with willows growing behind. Three beaver huts are located on the lake, one on each of the north, northwest (Plate # 5) and west shore of Unnamed Lake # 7.

The substrate along the southeast shore is comprised of fines, gravels and cobbles with some boulders. Around the rest of the lake, the substrate is dominated by silts and organics with some large woody debris. The lake's bottom drops off slowly towards the center of the lake on all sides.

Surrounding Country:

Unnamed Lake # 7 is surrounded by a mature forest of spruce and lodgepole pine trees growing on low, gently rolling hills. A large clear cut is found to the northwest approximately 1.0 km away from the lake and mountains can be seen in the distance to the northeast. Tchentlo Lake is found approximately 2.0 km to the south of the lake. Unnamed Lake # 7 is situated within the Sub-Boreal Spruce biogeoclimatic zone.

LAKE: Unnamed Lake # 7

ACCESS

Directions:

From the junction of Highway 27, the Teardrop Forest Service Road and the Germansen Landing North Road, follow the Teardrop Forest Service road west for approximately 40 km. Turn right on to the Leo Creek Forest Service Road and proceed for approximately 68 km to where the Driftwood Forest Service Road breaks off. Turn right on to the Driftwood Forest Service Road and drive for approximately 15 km to the entrance to the Tchentlo Lake Lodge. From the Tchentlo Lake Lodge, Unnamed Lake # 7 is approximately a 17.5 km helicopter ride to the west.

Road Type and Conditions:

All three of the forest service roads are well maintained, two lane gravel roads that can be easily traveled in the summer with a two wheel drive vehicle.

Restrictions:

None known.

RESORTS AND CAMPSITES

There are no resorts or campsites on Unnamed Lake # 7. However, the northwest side of the lake would be an ideal location for a Forest Recreation Site.

OTHER DEVELOPMENTS

None.

OBSTRUCTIONS AND POLLUTIONS

None noted.

LAKE: Unnamed Lake # 7

SPECIAL RESTRICTIONS

None known.

AQUATIC PLANTS

The following aquatic plants were identified during the time of survey:

claspingleaf pondweed (Potamogeton richardsonii)	Equisetum sp.
small pondweed (Potamoaeton pusillus)	sedge grasses

WILDLIFE OBSERVATIONS

The following wildlife or signs were seen during the time of the survey:

moose	muskrat
various songbirds	numerous Frogs

MISCELLANEOUS COMMENTS

1) The small grassy area located on the north shore of Unnamed Lake # 7 is fairly dry and is a good spot for a helicopter landing site or a launching site for a boat. If a Forest Recreation Site was to be built on this lake, the area surrounding this location would be a good spot.

2) A portage trail could be established between Tchentlo Lake and Unnamed Lake # 7 to provide an out-of-the-way Forest Recreation Site.

3) There was a cow moose that stayed around the lake during almost all of July 16 (the day of the survey).

4) Bathymetric map: The lake outline was drawn from an enlargement of air photo 30 BCB 90092: No. 043, flown on July 27, 1990.

LAKE: Unnamed Lake # 7

LAKE DRAINAGE

General:

Unnamed Lake # 7 is fed by two main inlets and two seasonal inlets. The lake is drained to the southwest by an unnamed creek that flows approximately 2.1 km to Tchentlo Lake. Tchentlo Lake is drained to the east by the Nation River.

Major Systems:

There are no major systems.

Minor Systems:

Inlet # 1 - Unnamed Creek

Inlet # 1 enters Unnamed Lake # 7 just south of beaver hut # 2 on the northwest shore of the lake (Plate # 5). Approximately 45 m upstream of the lake, a fallen log has created a 0.1 m high debris jam. Water flows freely over the top and the jam, and is passable to fish moving in either direction. There is a large amount of large woody debris fallen into the creek as well as a large amount of alder trees growing over the creek. The substrate in the first 60 m is mainly large gravel and fines with some small gravel and small cobble. Approximately 60 m upstream from the lake, the substrate becomes heavily silted and covered in organics. Inlet # 7 offered some limited spawning habitat during the survey period.

A Stream Survey card was completed for a sample site located approximately 40 m upstream from the Unnamed Lake # 7 (Plates # 6 - # 7). The average wetted width is 1.3 m and the average maximum riffle depth is 0.05 m. The substrate is composed of gravels (45%), fines (40%) and small cobble (15%). The creek morphology is dominated by riffles (60%) and runs (40%). For additional information, refer to Appendix B.

Inlet # 2 - Unnamed Creek

Inlet # 2 drains into Unnamed Lake # 7 through the marsh in the east corner of the lake. The creek has an average wetted width of 0.6 m and depth of 0.4 m. The substrate is silts and organics with some orange organic scum found throughout the length of creek surveyed. There are three beaver dams located approximately 8 m (Plate # 8), 20 m and 55 m upstream from the lake that are 0.5 m, 0.55 m and 0.45 m high respectively. Upstream fish movement was impossible at the time of survey because there was no water flowing either over any of the dams. No flow was noticeable along the entire length of the creek surveyed. Inlet # 2 had no fisheries potential during the survey period.

LAKE: Unnamed Lake # 7

Outlet - Unnamed Creek

The outlet drains Unnamed Lake # 7 to the southwest (Plate # 9). Approximately 75 m downstream of the lake, there is 0.5 m high and 50 m long beaver dam with a beaver hut. The dam has been breached in the middle allowing for fish to move freely to either side. The creek has a wetted width of 25 m on the downstream side of the first dam. Approximately 180 m downstream of the lake, there is a second beaver dam that is 0.75 m high and 30 m long. Behind this dam, the creek narrows to a wetted width of 5 m with an average depth of 0.6 m. Approximately 195 m downstream of Unnamed Lake # 7, there is a third beaver dam that is 0.9 m high and 16 m long (Plate # 10). There are four more beaver dams located at 200 m, 205 m (Plate # 16), 210 m and 225 m downstream from the lake that are 0.15 m, 0.6 m, 0.5 m and 1.0 m high respectively. Upstream passage was probably not possible over the larger dams,(> 0.6 m high) at the time of survey due to the lack of sufficient flow over the dams. The substrate for the entire length of creek walked is silts and organics with lots of large woody debris fallen into the creek. Willows grow thickly on both sides of the creek. The outlet had no fisheries potential during the survey period.

LAKE: Unnamed Lake # 7

FISHERIES MANAGEMENT COMMENTS

Unnamed Lake # 7 supports a decent size population of rainbow trout. The rainbow trout that were sampled were all very fat fish (i.e.: 22 cm long and 6 cm deep) which suggests that there is a very good food source for the lake. The only spawning habitat found during the survey was in Inlet # 1. However, the inlet is very shallow (0.05 m deep) and may not be deep enough even in the spring for spawn bound fish to use. Increasing the water depth may create better spawning habitat. As well, providing better access to areas further downstream on the outlet creek by breaching the beaver dams may provide for better spawning habitat than is now accessible. Although no spawning habitat was found in the outlet, there may be some spawning habitat located further downstream than the length of creek that was surveyed.

HISTORY OF PREVIOUS SURVEYS

Lake Surveys:

None known.

Other Related Studies:

None known.

LAKE: Unnamed Lake # 7

WATER CHEMISTRY SUMMARY **Limnology Station No. 1**

Field Conditions:

Date:	July 16, 1996		
Time:	1205 hrs	Air Temperature:	15 °C
Wind Velocity:	10 - 15 km/h	Wind Direction:	from the SW
Cloud Cover:	3 / 10 o.c.	Surface Conditions:	small waves
Secchi Disc:	3.15 m	Water Colour:	yellow / orange

Method Used:

Dissolved Oxygen:	YSI Model 57 Oxygen / Temperature Meter
Water Temperature:	YSI Model 57 Oxygen / Temperature Meter
Air Temperature:	Hand-Held Alcohol Thermometer
pH (field):	Digital pH Pocket Tester
H2S (field):	Hach H2S Field Test Kit
Laboratory Used:	Pacific Environmental Science Center
Water Sampler:	Vertical Alpha Water Bottle (Vandorn)
Metal Sampler:	By Hand; Preserved With 2.0 mL Nitric Acid
Substrate Sampler:	Substrate Sample Not Taken

Water Sample Chemistry: **SEAM Site No.:** E 223187

	Sampling Depths	
	Surface (0.5 m)	Lower (4.0 m)
Alkalinity (lab)	39.3 mg / L	39.4 mg / L
Filterable Residue 105°C (lab)	70 mg / L	120 mg / L
H2S (field)	N / A	0mg / L
Nitrogen - Total (lab)	0.42 mg / L	0.8 mg / L
Non-Filterable Residue (lab)	< 5 mg / L	8 mg / L
pH (field)	7.7	7.4
pH (lab)	7.61	6.96
Phosphorus - Total Dissolved (lab)	0.016 mg/L	0.047 mg / L
Specific Conductance (lab)	72 µS /cm	172 µS / cm

Bottom Depth: 5.1 m

Substrate Sample Depth: N/A

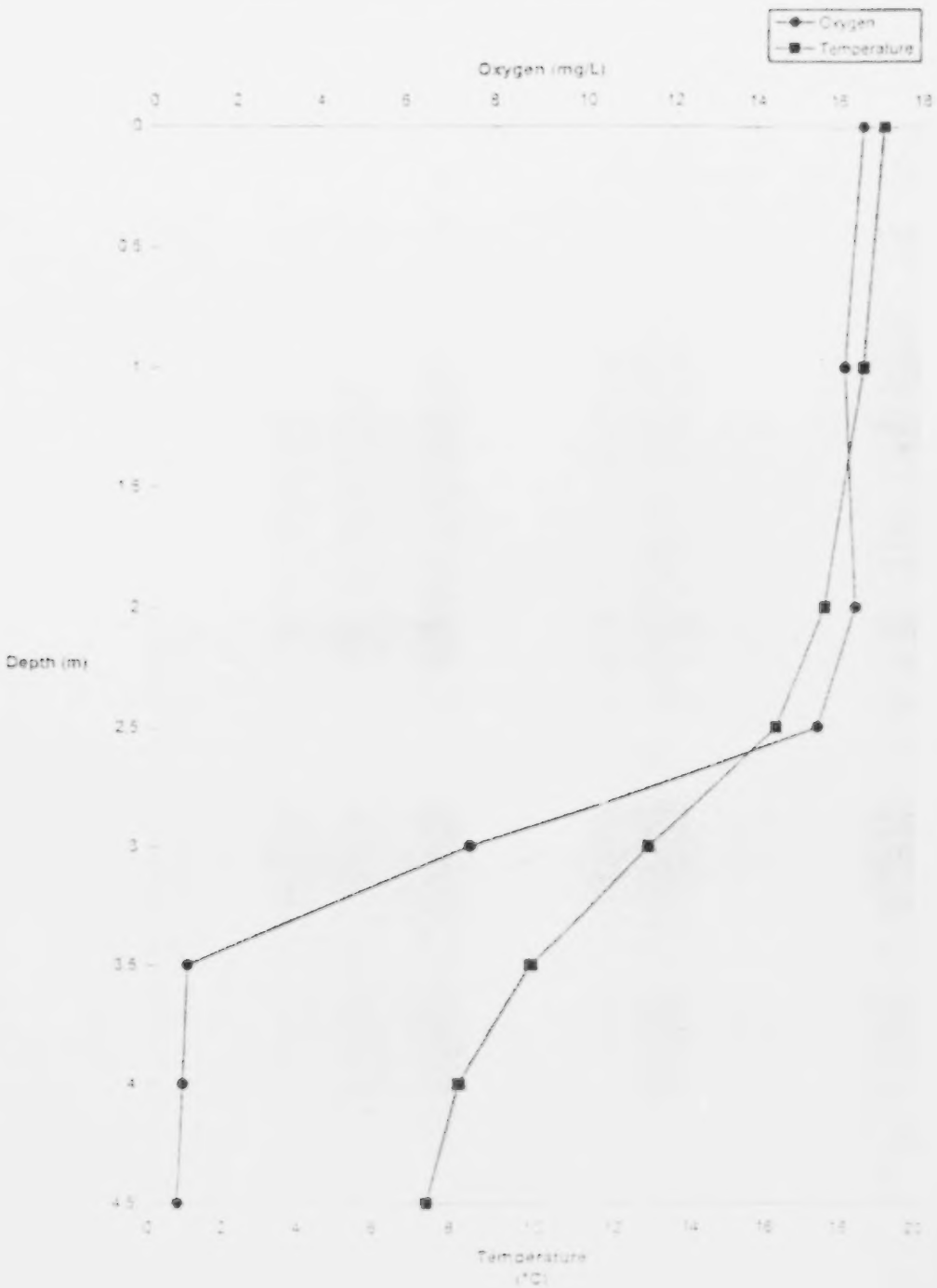
* additional analyzed parameters and results, including metals, are found in Appendix 1

LAKE: Unnamed Lake # 7

SUMMER OXYGEN / TEMPERATURE DATA

DEPTH (m)	02 (mg / L)	TEMPERATURE (°C)
Surface	16.6	19.0
1.0	16.2	18.5
2.0	16.5	17.5
2.5	15.6	16.2
3.0	7.6	12.8
3.5	0.9	9.9
4.0	0.8	8.2
4.5	0.7	7.4
5.1	Bottom	

SUMMER OXYGEN / TEMPERATURE PROFILE



LAKE: Unnamed Lake # 7

NETTING RECORD

Mesh Size Experimental Order: 25, 76, 51, 89, 38, 64 mm

NETTING SITE # 1

Type:	Sinking Monofilament Gill Net			
Date Set:	July 16, 1996		Time:	0948 hrs
Date Lifted:	July 16, 1996		Time:	1430 hrs
Net Dimensions:	Length:	91.4 m	Depth:	2.4 m
Shallow End Mesh Size:	25 mm		Depth:	0.8 m
			Substrate:	organics over sand and small gravel
Deep End Mesh Size:	64 mm		Depth:	5.0 m
			Substrate:	silt / organics

Comments:

LAKE CATCH SUMMARY

Species	Netting Site	Angled	Other	Total	Number	Number	Size Range
	No. 1				Sampled	Preserved	(cm)
RB	28	0	0	28	24	0	12.6-22.0
WS	6	0	0	6	0	0	11.7-32.3

Minnow Traps:

Bait: Sardines

Trap No.	Hours	Depth (m)	Substrate	Species	No. Caught	Size Range (cm)
1	5:50	0.7	silt / organics with pondweed	empty	0	-
2	5:50	0.8	silt / organics with woody debris	empty	0	-
3	5:50	0.8	silt / organics with woody debris	empty	0	-
4	5:48	0.8	silt / organics with pondweed	empty	0	-

LAKE: Unnamed Lake # 7

INDIVIDUAL FISH DATA

Date Captured: July 16, 1996

Method: Sinking Monofilament Gillnet

M - Male
F - Female
? - Not Obvious

IMM - Immature
MG - Maturing
MT - Mature
GV - Gravid
SP - Spent
? - Not Obvious

EG - Egg
FR - Fin Ray
HD - Head
ML - Molt
OT - Otolith
SC - Scale

Species	Fork Length (cm)	Weight (grams)	Sex	Gonadal Maturity	Sample Type	Age (yr)	Stomach Contents				Comments
							Plankton	Insects	Fish	Other	
RB	20.4	120	M	MG	SC		Ch	Cr			
RB	20.8	140	M	MG	SC		Ch	Cr			
RB	20.8	128	F	IMM	SC		Ch	Cr			
RB	20.3	127	M	IMM	SC		Ch				
RB	16.3	58	M	IMM	SC			Cr			
RB	19.6	103	F	IMM	SC		Ch				
RB	20.0	127	F	IMM	SC		Ch				
RB	18.8	104	M	MG	SC		Ch				
RB	12.6	21	M	IMM	SC		Ch				
RB	17.7	67	M	IMM	SC		Ch				
RB	13.8	16	F	IMM	SC		Ch				
RB	18.4	100	F	IMM	SC		Ch				
RB	22.0	180	F	IMM	SC		Ch				photo taken of fish (plate # 19)
RB	15.6	47	M	IMM	SC		Ch				
RB	19.3	102	M	IMM	SC		Ch				
RB	20.0	127	F	IMM	SC		Ch	Cr			
RB	18.8	104	M	MG	SC		Ch	Cr			
RB	16.9	63	F	IMM	SC		Ch				
RB	17.1	63	M	IMM	SC		Ch				
RB	19.4	105	F	IMM	SC		Ch				
RB	17.1	66	M	IMM	SC		Ch				
RB	18.3	95	M	IMM	SC		Ch				
RB	15.6	47	M	IMM	SC		Ch				
RB	14.2	34	F	IMM	SC		Ch				

B - Beetle
C - Clams
CL - Caddis Larvae
Ch - *Chaoborus*
Cr - Chironomids
Da - *Daphnia*
Dt - Diptera
G - *Gammerus*
L - Leech
Li - Lice
O - Organics
S - Snails
St - Stomach
TP - Tape Worm
WB - Water Boatman
WF - Whole Fish

NS 1
LS 1
LOCATION OF INVENTORY SITES
Benchmark
Stream Number And Direction Of Flow
Net Set Number And Size
Plate Number And Direction Of Photograph

LAKE: Unnamed Lake # 7

PHOTOGRAPH DIRECTORY

'late	Roll : Number	Description
1	8: 19	Aerial view of Unnamed Lake # 7 looking northeast.
2	7: 24 - 22	Panoramic view of Unnamed Lake # 7 looking southwest from the center of the lake.
3	7: 21 - 19	Panoramic view of Unnamed Lake # 7 looking northeast from the center of the lake.
4	7:1	View of the benchmark located 2.0 m above present water level in a 20 cm diameter lodgepole pine tree that is 5.6 m from the present water's edge and located on the northwest side of the lake approximately 45 m north of beaver hut # 2. Note the tents in the background.
5	7: 18	View of beaver hut # 2 located on the northwest side of Unnamed Lake # 7. Inlet # 1 enters Unnamed Lake # 7 just to the left of the beaver hut.
6	7: 16	Upstream view of the sample site on Inlet # 1, taken approximately 35 m upstream of Unnamed Lake # 7.
7	7: 15	Downstream view of the sample site on Inlet # 1, taken approximately 45 m upstream of Unnamed Lake # 7.
8	7: 12	Upstream view of beaver dam # 1 on Inlet # 2, located approximately 8 m upstream of Unnamed Lake # 7. Dam height is 0.5 m.
9	7: 2	View of the mouth of the outlet that drains Unnamed Lake # 7 to the southwest.
10	7: 5	Downstream view of beaver dam # 3 on the outlet, located approximately 195 m downstream of Unnamed Lake # 7. Dam height is 0.9 m.

LAKE: Unnamed Lake # 7

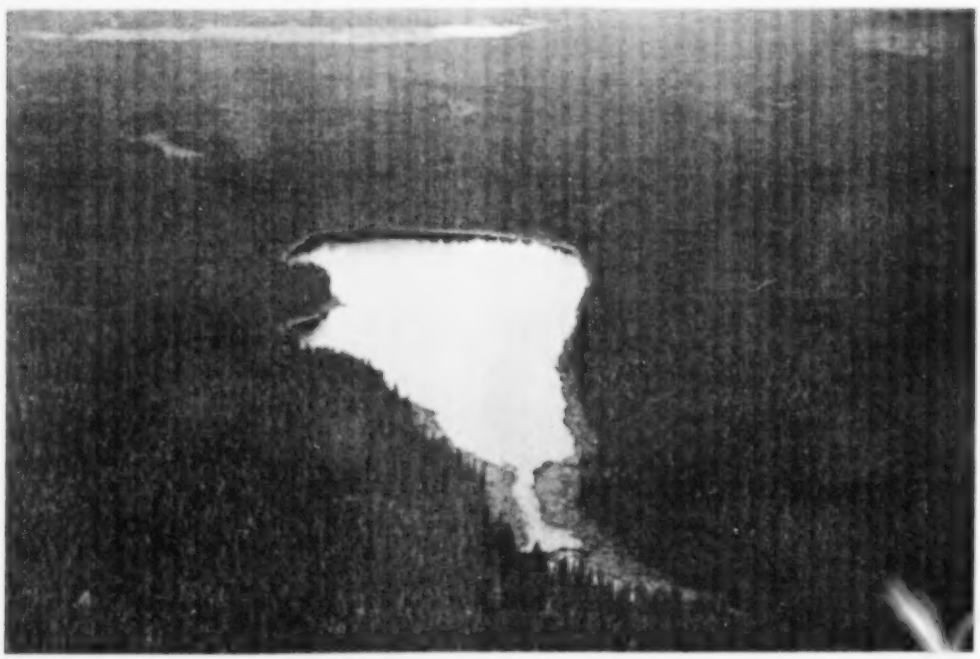


Plate # 1: Aerial view of Unnamed Lake # 7 looking- northeast.

LAKE: Unnamed Lake # 7

Plate # 2: Panoramic view of Unnamed Lake # 7 looking southwest from the center of the lake

LAKE: Unnamed Lake # 7

Plate # 3: Panoramic view of Unnamed Lake # 7 looking northeast from the center of the lake.

LAKE: Unnamed Lake # 7

Plate # 4: View of the benchmark located 2.0 m above present water level in a 20 cm diameter Lodgepole pine tree that is 5.6 m from the present water's edge and located on the northwest side of the lake approximately 45 m north of beaver hut # 2. Note the tents in the background.

Plate # 5: View of beaver hut # 2 located on the northwest side of Unnamed Lake # 7. Inlet # 1 enters Unnamed Lake # 7 just to the left of the beaver hut.

Plate # 6: Upstream view of the sample site on Inlet # 1, taken approximately 35 m upstream of Unnamed Lake # 7.

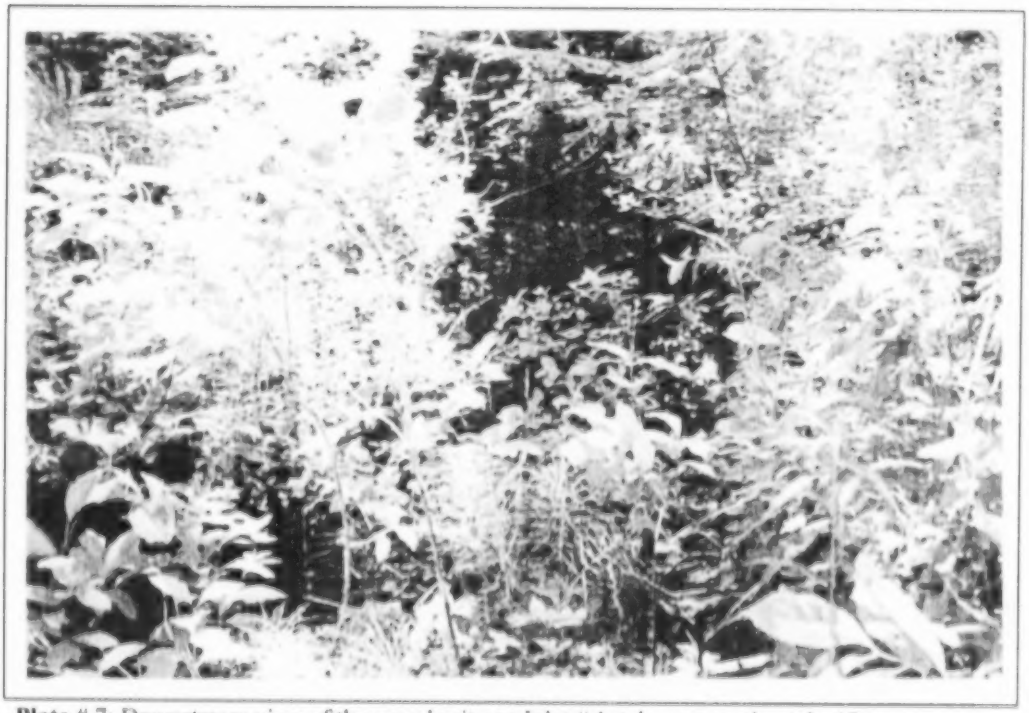


Plate # 7: Downstream view of the sample site on Inlet # 1, taken approximately 45 m upstream of Unnamed Lake # 7.

Plate # 8: Upstream view of beaver dam # I on Inlet # 2, located approximately 8 m upstream of Unnamed Lake # 7. Dam height is 0.5 m.

LAKE: Unnamed Lake # 7

Plate # 9: View of the mouth of the outlet that drains Unnamed Lake # 7 to the southwest.

Plate # 10: Downstream view of beaver dam # 3 on the outlet, located approximately 195 m downstream of Unnamed Lake # 7. Dam height is 0.9 m.

Appendix A

LABORATORY REPORT

Water Chemistry Analysis

RESULTS FOR UNNAMED LAKE #7 - 96/07/16 SAMPLES

Parameter Analyzed		Units	E223187 0.5M 963117-001	E223187 4.0M 963117-002
ALKALINITY		mg/l	39.3	39.4
CONDUCTIVITY		uS/cm	72	172
METALS/TOTAL (WATER-ICP)	AG	mg/l	<.01	-
	AL	mg/l	.07	-
	AS	mg/l	<.06	-
	B	mg/l	<.01	-
	BA	mg/l	.025	-
	BE	mg/l	<.001	-
	CA	mg/l	9.1	-
	CD	mg/l	<.006	-
	CO	mg/l	<.006	-
	CR	mg/l	<.006	-
	CU	mg/l	<.006	-
	FE	mg/l	.46	-
	K	mg/l	.2	-
	MG	mg/l	4.1	-
	MN	mg/l	.018	-
	MO	mg/l	<.01	-
	NA	mg/l	1.2	-
	NI	mg/l	<.02	-
	P	mg/l	<.1	-
	PB	mg/l	<.06	-
	SB	mg/l	<.06	-
	SE	mg/l	<.06	-
	SI	mg/l	1.61	-
	SN	mg/l	<.06	-
	SR	mg/l	.05	-
	TI	mg/l	<.002	-
	V	mg/l	<.01	-
	ZN	mg/l	.004	-
NITROGEN/AMMONIA		mg/l	.022	.282
/NITRITE+NITRATE		mg/l	.02	<.002
/TOTAL		mg/l	.42	.8
PH		Rel.U.	7.61	6.96
PHOSPHORUS/O-PO4		mg/l	.003	.019
/TOTAL		mg/l	.019	.064
/TOTAL DISSOLVED		mg/l	.016	.047
RESIDUE/FILTERABLE		mg/l	70	120
/NON-FILTERABLE		mg/l	<5	8

Appendix B

Tributary Stream Data

D.F.O. / M.O.E. Stream Survey Form

DFO / MOE

STREAM SURVEY FORM

Stream Name: Unnamed A

Watershed Code:

Location:

Date:

C	PARAMETER	VALUE	MEAN	SPECIFIC DATA
	Ave Chan Width (m)			
	Ave Wet Width (m)			
	Ave Max Pool Depth (m)			
	Ave Max Pool Depth (m)			
	Gradient %			
	Pool C Rif			
	Ave Chan %			
	Dens Area %			
	Depos Width Stable %			
	COVER Total %			

C	STREAMBED MATERIAL	%
	Bedrock	
	Boulder	
	Cobble	
	Gravel	
	Sand	
	Silt	
	Clay	
	Organic	

Best Spawning Material:

C	BANKS
	Height (m) / Substrate
	Texture

Confinement: Low Mod High

Valley Channel Ratio: 0-1 1-2 2-5 5-10 >10 N/A

Flood: Rare L M H Flood

Flood Signs Present: Yes / No

Bank %:

Weak Area %:

DISCHARGE

Parameter	Unit	Method	Specific Data				
Wetted Width (m)							
Mean Depth (m)							
Mean Velocity (m/s)							
Discharge (m³/s)							

REACH SYMBOL

FISH SUMMARY

C	Species	No.	Size Range (mm)	Life Phase	Est. Method/Ref.

STREAM VALLEY CROSS-SECTION

Looking Downstream

L R

PLANIMETRIC VIEW

COMMENTS

Channel Stability / Debris / Management Concerns / Obstructions / Riparian Zone / Fish Habitat Potential / Etc.

Appendix C

FISH SCALE ANALYSIS

Age Determination Completed By:

A.M.C. Technical Services Ltd.
Melinda M. Hirst
6809 Phillip Road.
Lantzville, B.C.
VOR 2H0

SEE ORIGINAL COPY

FOR SCALE SAMPLE READINGS

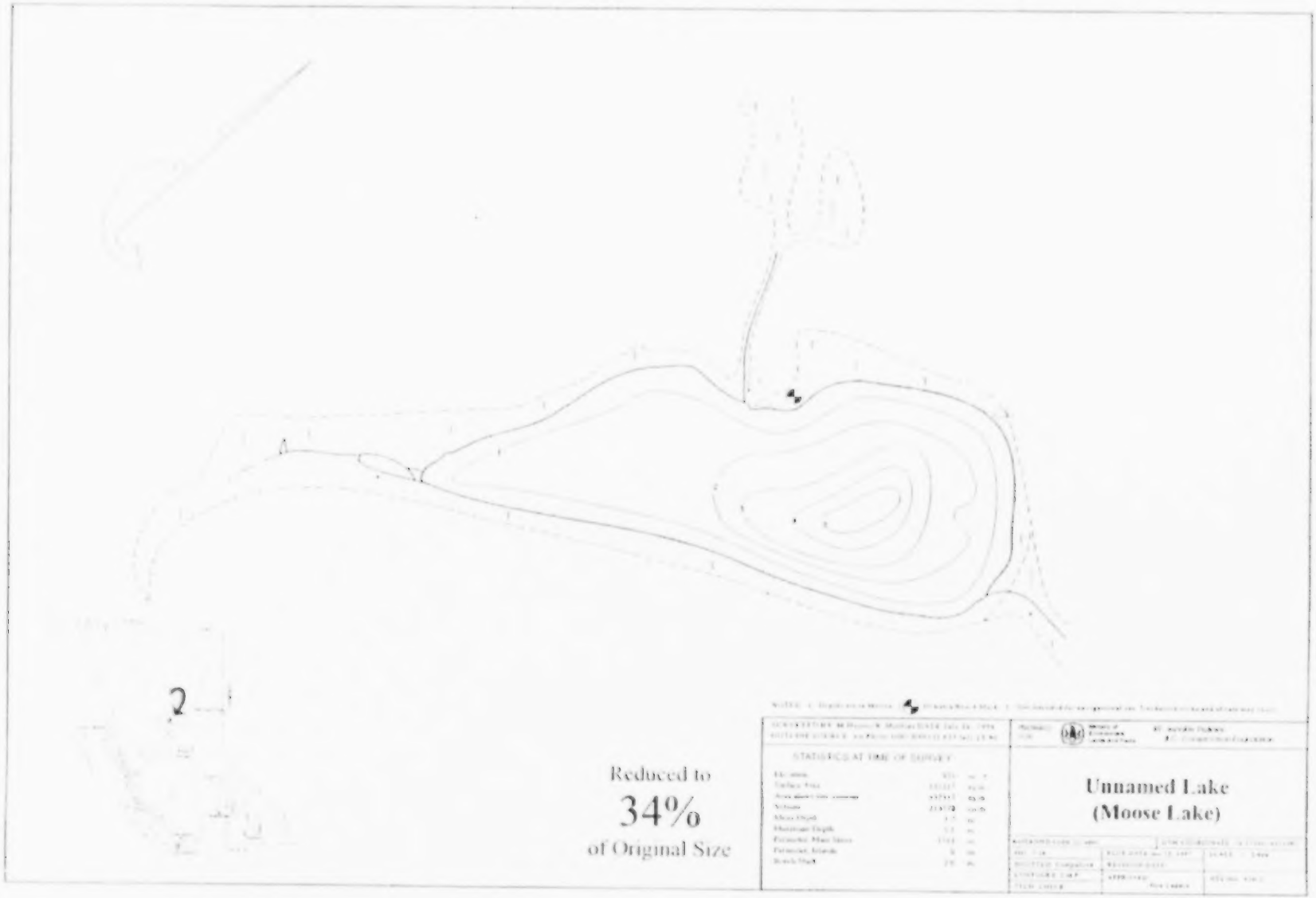
ORIGINAL COPY IS HELD BY

B. C. MINISTRY OF ENVIRONMENT, LANDS AND PA

PRINCE GEORGE, B. C.

Appendix D

BATHYMETRIC MAP



Reduced to
34%
of Original Size

Unnamed Lake
(Moose Lake)